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The Weyerhaeuser Company comments on proposed revisions to WAC 173-201A *Water Quality Standards for Surface Waters* are provided below.

At the outset, the Water Quality Program should again be complimented for a sustained, highly professional and transparent public involvement process on this regulation development activity. The quality of the agency work and commitment to engage willing stakeholders over these last five years has been exceptional.

Weyerhaeuser fully endorses the comment package submitted by the Northwest Pulp and Paper Association and other co-signers[1]. The NWPPA and Weyerhaeuser comment packages are extensive and, taken together, provide legal and science analysis on the key decision criteria framing the proposed rule. Many suggested changes/improvements to the proposed rule text are offered and supported in these comments.

General Comments on Proposed WAC 173-201A *Water Quality Standards for Surface Water*

1. Adopting this rule revision package would represent a mediocre public policy outcome for the state of Washington.
   Five years of regulation development activity now has the state of Washington proposing unnecessarily conservative human health based water quality criteria (HHWQC). The Department of Ecology's own evaluation of these numeric criteria strains to show any benefit to human health protection.

   Comments submitted by the Northwest Pulp and Paper Association offer details on the state of Washington's leap to unnecessarily stringent HHWQC. With a few important exceptions, Ecology's proposed criteria give only secondary consideration to accepted risk management principles, cost/benefit assessments, and relevant court decisions.

[1] "Northwest Pulp and Paper Association Comments on Draft Human Health Water Quality Criteria for the State of Washington," submitted by Chris McCabe, April 2016.

While the headline at time of rule adoption this autumn will make claims about cleaner water and improved public health, the near certain effect of this rule package in coming years will be incrementally higher cost to NPDES permittees (and thus the public), incrementally higher management and program delivery costs for the Department of Ecology, adverse secondary effects on state economic growth, stigmatization of Washington waters, more litigation; all of this for no practical benefit to the health of state residents (including high fish consuming population groups).

2. Ecology's static 2016 analysis on the implications of these proposed numeric criteria in the delivery of Clean Water Act programs is woefully and intentionally short-sighted.

Water quality numeric criteria serve as the regulatory foundation on which most Clean Water Act programs are based. With the pending adoption of criteria that are generally more stringent, Ecology can certainly anticipate the effect they will have on CWA program delivery. The "*Preliminary Cost-Benefit and Least Burdensome Alternative Analysis*[2]," makes only a token effort at a "best information" 20-year look-forward on the implementation realities of the proposed HHWQC.

The impact of more stringent HHWQC, coupled with enhanced analytical methodologies, and a growing body of ambient water quality and NPDES permittee discharge data, will ripple across CWA program implementation. In a 5-10 year timeframe Ecology can expect:

- Many thousands of new waterbody/pollutant Category 5 listings,
- A parallel demand for TMDLs. Each TMDL must necessarily spawn NPDES re-permitting transactions, non-point source reductions, or "other pollution control" program development to reduce trace toxic pollutant discharges. Experience indicates the combination of extraordinarily low HHWQC and societal/legacy/non-point/undefined pollutant sources will lead to TMDL "black holes" attainment of water quality standards is not likely.
- NPDES permittees will fail "reasonable potential analyses" with the need for customized WQBELs and ultimately a demand for tertiary wastewater treatment,
- Requests for variances of all types (individual, multi-discharger, waterbody). Requests for intake credit consideration. Both will represent enormous resource drains on the Water Quality Program,
- Litigation challenges seem probable when a Clean Water Act transaction fails to satisfy somebody.

It is easy to imagine credible scenarios in which aspects of the Water Quality Program service delivery becomes grid-locked and to the detriment of the state.

The state of Washington's lack of inquisitiveness in examining the likely broader effect of the proposed HHWQC over the next 20 years represents a major deficiency of this rule package.

[2] WDOE Publication no. 16-10-009, February 2016

3. Ecology must be commended for the practical and good science-based proposals for the setting of numeric criteria for total PCBs and total arsenic, and for choosing to retain the current National Toxic Rule numeric criterion for mercury. Similarly, agency decisions to retain a Relative Source Contribution value of 1.0 and to rely on a Bioconcentration Factor-based approach in criteria calculations, are reasonable and supported by the best available science.

4. The state of Washington should be committed to a legal defense of an adopted state water quality standards revision should the EPA chose to disapprove any aspect of the state rule per 40 CFR 131.21.

   Washington will certainly characterize its submittal of water quality standards to EPA as fully achieving the regulatory criteria in 40 CFR 131.5, 40 CFR 131.6 and 40 CFR 131.11(a), and assert per 40 CFR 131.5(b) that EPA must therefore approve the standards.[3] That said, a side-by-side comparison of EPA's September 2015 *Revision of Certain Water Quality Standards Applicable to Washington*[4], and the Department of Ecology's current HHWQC proposal, reveals many differences. It is not premature for Washington's Governor and the Department of Ecology to acknowledge the possibility of a partial EPA disapproval of state adopted standards (per 40 CFR 131.21). Should disapproval occur the Governor should be resolved to provide a vigorous legal (and political and public relations defense) of state adopted HHWQC revisions. Further, the state of Washington should make clear to EPA that any series of events that leaves the EPA September 2015 water quality standards proposal being promulgated and serving as Washington water quality standards is simply unacceptable.

5. Adoption of the proposed numeric criteria will exacerbate the already difficult management challenges facing Ecology's Water Quality Program. We encourage the agency to be especially pragmatic in creating implementation measures that will support efficient, timely, confident and realistic delivery of Clean Water Act programs.

   The coming promulgation of more stringent HHWQC will stress Ecology's ability to implement CWA programs. These impacts can be somewhat mitigated with thoughtful revisions to the Water Quality Program Policy 1-11 and Permit Writers Manual. The NPDES Permittee Coalition has identified technical/science and regulatory policy issues embedded in the current Policy 1-11 which should be reconsidered. A more robust and data-driven process should help reveal where Ecology's limited resources can best be applied for early and important water quality improvement. The Permit Writers Manual should include clear direction on what it will take to obtain a variance or intake credit.

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[3] We suggest the EPA Region X ideas on "endorsed" FCR, demand for 10e-6 incremental excess cancer risk, other agency guidance, environmental justice, federal trust responsibilities, tribal treaty rights, and probably other considerations, as presented in the Dennis McLerran December 18, 2014 letter to Maia Bellon, and other EPA communications through 2014, are advisory only and not prerequisites for judging achievement of regulatory criteria in 40 CFR 131.

[4] 80 FR 177, Pages 55063-55077, September 14, 2015

Specific Comments on proposed WAC 173-201A *Water Quality Standards for Surface Water*

1) WAC 173-201A-240(5)(a) – Text in this subsection could be repositioned to more accurately reflect Ecology's obligation and commitment with future aquatic life and human health criteria revisions.

   Discussion – Text in (5)(a) addresses aquatic life protection criteria and reads

   > "The department shall formally adopt any appropriate revised criteria as part of this chapter in accordance with the provisions established in chapter 34.05 RCW, the Administrative Procedures Act. The department shall ensure there are early opportunities for public review and comment on proposals to develop revised criteria."

   This commitment is not exclusive to aquatic life protection criteria discussion. It applies equally to human health protection criteria. Ecology should relocate this text to the parent (5) section to make this clear.

   If Ecology chooses not to accept this suggestion, then please include in the Response to Comment an explanation on whether revised human health protection criteria must be adopted in accordance with provisions established in chapter 34.05 RCW.

2) WAC 173-201A-240(5)(b) and Table 240 footnotes "C" and "F" – The inclusion of the specific fish consumption rate, exposure duration, and incremental excess cancer risk level used for deriving HHWQC, should all be removed from the rule text. There is no inherent value in presenting just these three parameters and point data values used in deriving the HHWQC, to the exclusion of many other parameters/values used in the deterministic algorithm. What is obviously important is the listing of actual numeric criteria in WAC 173-201A-240.

   Discussion – Ecology should be content to rely on the "*Washington State Water Quality Standards: Human Health Criteria and Implementation Tools – Overview of Key Decisions*"[5], to reveal details on the HHWQC derivation methodology and choice of parameter input values. The Key Decisions document could be included as part of the water quality standards submission to EPA to demonstrate the sufficiency and approvability of water quality standards.[6] To list just the FCR, exposure duration and excess cancer risk parameters and data values will encourage comments on those values, or the HHWQC derived from the parameter values, or to question why other important parameter/input values were not presented in regulation text. For example, EPA might

[5] "*Washington State Water Quality Standards: Human Health Criteria and Implementation Tools – Overview of Key Decisions,*" WDOE Publication No. 16-10-006, January 2016

[6] 40 CFR 131.5, 40 CFR 131.6, 40 CFR 131.11(a) broadly define the necessary technical and scientific elements of an approvable water quality standards submittal.

consider each parameter and data value worthy of a separate approval/disapproval decision. A disapproval determination on any aspect of the derivation process would compromise the integrity of the HHWQC package.

3) Table 240 Toxics Substances Criteria – The "Category" column could be deleted.

Discussion - There is no compelling regulatory reason to present a qualitative identification of a Compound/Chemical by pollutant category. For example, there is scant value in identifying that Antimony is in the "Metals, cyanide and total phenols" Category.

4) Table 240 Toxics Substances Criteria – A column should be added to Table 240 which specifies the "Approved Analytical Protocol(s)," and identifies the expectations for Detection and Quantitation Levels, and instructions and qualifications, as appropriate. Consistent with WAC 173-201A-260(3)(h) these analytical methods would reference to the 40 CFR 136 methods in effect on the date of WAC 173-201A adoption.

Discussion – The regulatory effect of water quality standards depends on the numeric criterion concentration and the ability of an analytical method to assess the presence of the pollutant in an ambient water sample, at or below the criterion concentration. As proposed in the current rulemaking, there are 51 freshwater toxic pollutants where the numeric criterion proposed by Ecology are below the 40 CFR 136 method detection levels or quantification levels. The inability to detect these pollutants at the concentration of the water quality criterion means they have no practical regulatory significance. But if (or when) pollutant analytical methods are improved and adopted into 40 CFR 136, the real regulatory implications of these 2016 HHWQC will come into focus. The state of Washington will have silently "backed-into" possibly very significant regulatory requirements that may or may not be in the public interest.[7] [8] Ecology certainly understands the significance of this issue. Transparency and fairness should compel a notice and public involvement process.

To summarize this very important comment, it is the HHWQC and accompanying 40 CFR 136 approved analytical method(s) which together work to define the regulatory effect of any water quality criterion. Ecology should specify in regulation the approved or recommended methodology(ies) to evaluate pollutant concentrations in ambient waters and, as 40 CFR 136 methods change, commit to a formal regulation amendment of Table 240.

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[7] The example we have come to appreciate over the last five years is for Polychlorinated Biphenyls. The 40 CFR 136 approved method is EPA Method 608 (Arochlors). Ecology has been selectively comfortable using the unapproved 40 CFR 136 Method 1668 for assessing PCB (congeners) in ambient water. Should Method 1668 ever be adopted in 40 CFR 136 it would have multi-billion dollar cost implications to the residents of Washington as Clean Water Act programs are implemented in the state.

[8] Note that a pairing of toxic pollutant evaluation and specification of 40 CFR 136 methods is embedded in the agency's NPDES permit program. Ecology-issued NPDES permits include an appendix titled "List of pollutants with analytical methods, detection limits and quantitation levels," with the "Recommended Analytical Protocol," "Detection and Quantitation Levels" specified, and other explanations and qualifications.

As an alternative to adding a column in Table 240 delineating HHWQC/methodologies, the agency could address the same need with an amendment to WAC 173-201A-260(3)(h) (see next comment).

5) WAC 173-201A-260(3) (h) – This subsection should be amended to establish an unambiguous regulatory process requiring amendment of WAC 173-201A to announce revisions to 40 CFR 136 analytical methodologies.

Discussion - Existing WAC 173-201A-260(3) (h) announces agency intentions on the use of approved analytical methodologies to evaluate ambient water quality. An important amendment should be adopted (see underlined text).

> (h) The analytical testing methods for these numeric criteria must be in accordance with the "*Guidelines Establishing Test Procedures for the Analysis of Pollutants*" (40 CFR 136) ~~or superseding methods published~~ in effect on (*date of rule adoption*). The department may also approve other methods following consultation with adjacent states and with the approval of the USEPA. Any superseding methods or other methods not published in 40 CFR 136, will become effective when adopted into WAC 173-201A.

The effect of this suggested amendment would be to require a regulatory action to announce the incorporation of federal regulation changes into state regulation ("in effect on (*date*)" or "when adopted into WAC 173-201A"), in contrast to the passive/silent process existing in the current rule ("or superseding methods published"). This change would provide a reasonable "fair warning of a due process requirement" to the public. This is not an unfamiliar process for the Department of Ecology. Agency regulatory programs that have been delegated implementation authority from the EPA routinely update state rules through an "adoption by reference" process or equivalent.[9]

Finally, this requirement to provide notice of changed federal regulation requirements is demanded by Washington case law. Three Washington Supreme Court decisions have held that the adoption of future federal rules, regulations or statutes would be an unconstitutional delegation of legislative power. (State of Washington, Kirschner v. Urquhart, 50 Wash.2d 131. April 1957; Yelle v. Bishop, 55 Wash.2d 131. December 1959;

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[9] This obligation to periodically update Washington environmental regulations to stay current with changing EPA rules is routine in other programs implemented by Ecology. For example, WAC 173-400 *General Regulation for Air Pollution Sources* is currently going through a rule revision to incorporate amended federal NESHAP and NSPS regulation provisions. The amendatory language in that rule reads as:

> **(New Section) WAC 173-400-025 Adoption of federal rules.** Federal rules mentioned in this rule are adopted as they exist on January 1, 2016, except for WAC 173-400-050(7). Adopted or adopted by reference means the federal rule applies as if it was copied into this rule.

Another recent example is WAC 173-351 *Criteria for Municipal Waste Landfills* in which the adopted regulation amendments were predominantly driven by the obligation to incorporate changing federal requirements in 40 CFR Part 258, Subtitle D of the Resource Conservation and Recovery Act.

State of Washington v. Readers Digest Association, 81 Wash.2d 259. Sep 1972.) 40 CFR 136 is an adopted federal regulation. As that federal regulation is revised a companion revision to WAC 173-201A must

Note that EPA's 40 CFR 136 was last amended in 2012. There is a regulation amendment proposal pending (described at 80 FR 8956 – 9075, February 19, 2015). In either the addition of a column in Table 240 or amendment of WAC 173-201A-260(3)(h), Ecology could simply add language to indicate the date of last revision of 40 CFR 136, and then update and adopt future federal rule changes by reference.

6) WAC 173-201A-420 Variance – Weyerhaeuser appreciates the inclusion of broader regulatory languages providing for variances. A variance offers a mechanism for NPDES permittees to maintain Clean Water Act compliance while working toward ultimate achievement of more stringent HHWAC. However, the sheer complexity of the regulatory process raises questions on whether the "on-paper" benefits of a variance could ever actually be realized.

Discussion – The proposed regulatory language is an expansion of WAC 173-201A-420 *Variances* and necessarily references 40 CFR 131.14. As proposed, the pathway to issuance of a variance includes extensive information development on science and technology questions, multiple favorable regulatory determinations by Ecology, targeted amendment of WAC 173-201A, modification of an NPDES permit(s), a formal review procedure with EPA and interested tribes, perhaps an ESA review, and then approval by EPA. This will be a formidable, resource-intensive, multi-year process.

Ecology has never issued a WQS variance and the "*Rule Implementation Plan: Water Quality Standards for Surface Waters of the State of Washington*" offers minimal commentary on the success elements for issuing a variance or sense of commitment on how the agency would ever turn the concept into reality[10]. The *Preliminary Cost-Benefit and Least Burdensome Alternative Analyses* seems not to recognize the certain Ecology and permittee resource demands associated with a variance issuance process, nor the implications to an NPDES permittee should the decision-making on a variance application stretch out for years or ultimately be unsuccessful[11]. Given the CWA realities mentioned in Comment #2 above, there is an under-appreciation of the likely reliance on variances as the practical implementation tool to accommodate more stringent HHWQC in NPDES permitting transactions.

7) WAC 173-201A-020 *Intake Credit* definition and WAC 173-201A-460 *Intake Credits*

Discussion – The proposed regulatory language is much improved over the January 2015 version. Although this administrative mechanism will not likely be relied on in many NPDES permitting transactions, it is nevertheless an important and reasonable regulatory concept.

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[10] WDOE Publication no. 16-10-005, January 2016

[11] WDOE Publication no. 16-10-009, February 2016

Weyerhaeuser appreciates Ecology's efforts to develop and include the Intake Credit concept in the water quality standards regulation.

Preliminary Benefit-Cost and Least Burdensome Alternative Analyses[12]

It is an admittedly difficult challenge to perform the RCW 34.05.328 cost/benefit assessment on the effects of the proposed regulation. While the format and topic areas addressed in the analysis seem comprehensive, the C/B conclusions in Chapter 8 are simply not credible. The reason stems from Ecology's insistence on a static analysis based on 2016 information. Surely the agency does not believe a look-back in 2036 (reflecting the presumed 20-year life of this regulation) will come close to matching the meager summary of costs and benefits presented in this immediate evaluation. The draft presentation opens the agency to justifiable criticism along the lines of "The State of Washington's revised toxic pollutant water quality standards are not expected to result in any higher level of wastewater treatment on NPDES permittees; no reduction of toxic pollutants into state waters; no ambient water quality improvement; no incremental cost for private or public entities; no meaningful human health benefits; etc."

We would encourage the agency to supplement Chapter 8 with a C/B assessment based on Ecology experience with CWA program implementation and the likely/probable/possible outcomes linked to more stringent HHWQC.

Here are a few comments (which are aligned with the numbering system in the Ecology document):

- Paragraphs 2.2.3 and 2.2.4 – It is appropriate that Ecology recognizes the Permit Writers Manual and Water Quality Program Policy 1-11 as elements of the "Baseline" for Clean Water Act program delivery. As mentioned in General Comment #5, agency discretion and policy choices presented in those guidance documents will have significant influence on program success. Ecology should always be open to meritorious and pragmatic changes in those documents.

- Paragraph 3.2.2 – A fish consumption rate of 175 gr/d is not representative of "average" fish and shellfish consumption of highly-exposed Puget Sound population groups. It is much closer to 90th percentile and, as pointed out in agency documents, includes all fish and shellfish, irrespective of source. This is a highly conservative policy (really a political) choice.

- Paragraph 4.2 and Chapter 5 – The analysis overlooks the costs the "public" will bear in the form of increased sewer rates if/when POTWs are required to install tertiary treatment to achieve a water quality-based effluent limit. A presentation by Bellingham

[12] "Preliminary Cost-Benefit and Least Burdensome Alternative Analyses," WDOE Publication No. 16-10-009 , February 2016

Mayor Kelli Linville to Governor Inslee (December 2013) articulates this reality (attached). The residents in the Spokane River watershed are certainly experiencing higher sewer bills as the wastewater treatment jurisdictions and other local governments chase PCBs entering the environment. The residents of the City of Vader will soon be paying for expensive wastewater treatment system upgrades driven by a 303(d) Category 5 impairment listing based on Fish Tissue results (newspaper article and Ecology letter enclosed). While these three examples are not directly connected to the proposed HHWQC revisions, they do offer advance notice on the progression of CWA program implementation leading to sewer rate increases. Ecology would be hard pressed to deny that adoption of more stringent HHWQC would not ultimately lead to this result.

- Chapter 5 – Likely Costs of the Proposed Rule – Here are a few costs areas that Ecology probably could estimate and mention.

  - The document identifies there will be 307 new Category 5 CWA 303(d) listings. These will each require development of a TMDL and then Ecology efforts to impose the Wasteload and Load Allocations, and more. Ecology's range of costs to produce and implement a TMDL should be known. Category 5 listings for toxics will surely increase in time as monitoring effort and more refined analytical methodologies combine to reveal impaired waterbodies.

  - Ecology's adoption of revised HHWQC will almost certainly generate legal appeals. The state will incur costs to defend the adopted HHWQC.

  - NPDES permittees unable to immediately comply with WQBELs driven by more stringent criteria will likely seek an extended compliance schedule or a variance. These will require resource intensive responses by Ecology. Some costs could be estimated.

  - The Spokane River Watershed effort to reduce PCBs represents a case-study that should not be overlooked. Could Ecology imagine another watershed, citizen concern with another HHWQC, the use of litigation and legal precedent, etc., in an effort to affect CWA program implementation?

- Chapter 6 – Likely Benefits of the Proposed Rule Amendments - Here are a few observations on benefits that Ecology could be more forthcoming about.

  - This Chapter alludes to qualitative human health benefits arising from adoption/implementation of the proposed HHWQS. But given the earlier acknowledgement that no toxic pollutant reductions from NPDES permittees will result from implementation of the proposed rule, and that TMDL work for the additional 307 impaired waterbodies "is not likely in the 20-year timeframe of this

analysis" (paragraph 5.6.2), what is the mechanism to accomplish improved health benefits (qualitative or quantitative)?

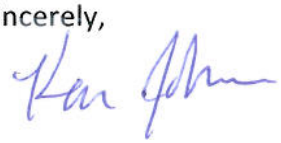
- The reduced incremental cancer rate attributable to the proposed HHWQC can be computed for any defined population group and for the general population. These population level analyses should be developed and presented so that state residents can understand the human health benefit expected from this rule proposal[13]. To provide a proper context, any claim of cost savings due to reduced cancer rates (mortality or pecuniary or non-pecuniary cost of illness) being assigned to the adoption of more stringent HHWQC can and should be based on Washington population demographics and survey fish/shellfish consumption information.

- Finally, given Ecology's own conclusion that water quality benefits arising from this proposed rule are not quantifiable, the discussion in sections 6.2 *Potentially affected entities and benefits* and 7.5 *Non-use benefits under future improvements in sampling and testing* simply lacks relevance and credibility.

- Chapter 9 - The Least Burdensome Alternative Analysis lacks rigor. The agency asserts the "elements of the proposed rule" result in the least burdensome regulation that meets the goals and objectives of the statute. This analysis is too narrow and a number of credible and CWA compliant HHWQC alternatives could be developed. As a single example, Ecology presented a compelling HHWQC rule package in January 2015 that included a choice of 10e-5 as a fully protective incremental excess cancer risk level. How is it then in the current rule proposal that an excess cancer risk level of 10e-6, resulting in more stringent HHWQC, is the better choice? In what sense would it lead to a less burdensome result for those obligated to comply with it?

Thank you for the opportunities provided to Weyerhaeuser to participate in the many public involvement activities over the last several years.

Sincerely,



Ken Johnson
Corporate Environmental Manager

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[13] As an example, the primary target population group these revised HHWQC seek to protect are "American Indian and Alaska natives." This population group numbers about 104,000. Tribal survey data indicate a fish consumption rate of 175 gr/day corresponds to about the 90th percentile consumption rate for that population group (see pages 18 and 75, "Final Fish Consumption Rates Technical Support Document," WDOE, Publication no. 12-09-058). Thus, 10,400 tribal members consume fish at or above 175 gr/day. At an incremental lifetime cancer risk rate of 1 x 10e-6, the estimated lifetime total additional cancers among the Washington tribal population consuming maximally contaminated fish at more than 175 gr/day would be much less than 1 (actually 0.01). At a population level, the one additional cancer incident theoretically arising from Ecology's HHWQC exposure scenario will present itself sometime in the next one hundred 70-year generations of tribal members (7,000 years). Any assertion of cost impacts from mortality or illness for this high consuming population group should be spread out over the next few thousand years.